

SpectraWow MKII

RGB LED Fixture

User Manual

V1.01



SpectraWow MKII

Thank you for choosing LDDE SpectraWow MKII. The SpectraWow MKII is a compact RGB-LED fixture and is ideal for lighting effects in decoration, fixtures in truss systems, small stages and anywhere else you need to find lighting solutions for narrow spaces. Eighteen selected High Power LEDs in RGB(AW*) guarantee a high color reproduction.

SpectraWow MKII Features

- selected 1W CREE X-Lamp High Power-LEDs
- soc®-technology for 0 - 100% control
- exchangeable lens system in narrow, medium and wide
- flicker-free, perfectly suited for TV und theatres
- extremely low power consumption
- 60.000 hour lifespan
- silent operation (no fan)
- aluminium strand casting profile with compact design
- 4 pole Neutrik XLR connectors (24VDC/DMX512)
- insensitive to vibrations

Delivery contents

Included in the SpectraWow MKII delivery:

- 1 x SpectraWow MKII fixture with 16mm DIN spigot
- User manual

Important safety notes



» Before starting up operation of the SpectraWow+ please read these safety notes carefully.



» Check as to whether the planned use of the appliance is advisable.

» SpectraWow MKII is not suitable for outdoor use (IP20).

» Never look directly into the open LED light source.



» Do not use optical appliances or other devices to bundle the LED light beam other than those modules designated by LDDE.

» Never attempt to repair or disassemble SpectraWow MKII. Opening or removing the inner cover can cause electroshocks or other injuries.

» If problems arise, always contact an authorised LDDE partner or LDDE directly.

» Never reach into the appliance when it is in operation.

» Always detach the power plug before moving or cleaning the appliance.

» Don't expose SpectraWow MKII to heavy jolts and concussion.

» Protect the appliance against moisture and wetness. Ensure that no wet or damp parts come in contact with the appliance.

» Relative air humidity should be between 20 and 85%.

» To ensure adequate ventilation, make sure that the appliance is not covered.



» Never place objects in openings in the enclosure as they could come into contact with parts under electric current and cause short circuits. There is danger of electroshocks or fire.

» If you have cause to assume that safe operation is no longer possible, cease operation of the appliance. This is the case when:

- The appliance shows visible damage.
- Parts of the appliance are loose or detached.
- Connection lines are visibly damaged.



» LDDE products are produced and delivered in accordance with Directive 2002/96/EC of the European Parliament and of the Council on Waste Electrical and Electronic Equipment (WEEE). Help to protect the environment, submit waste equipment to local recycling facilities. Your dealer can give you further information on correct disposal.

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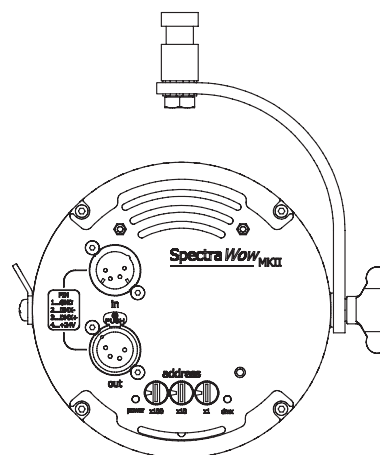
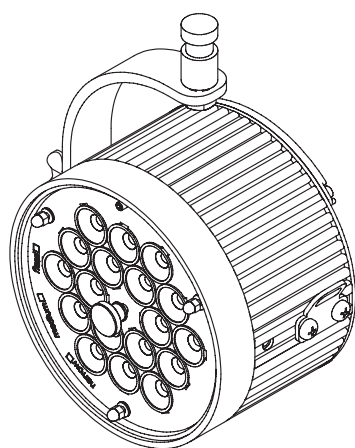
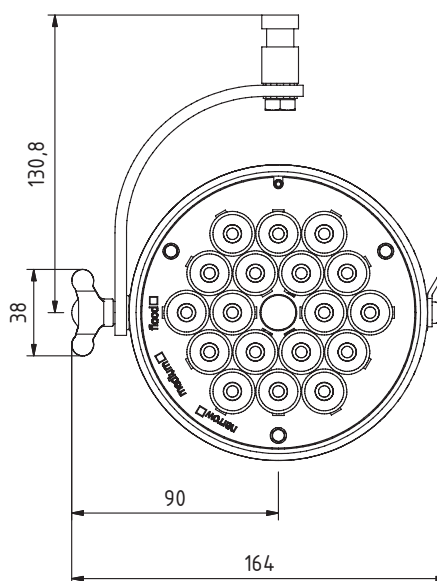
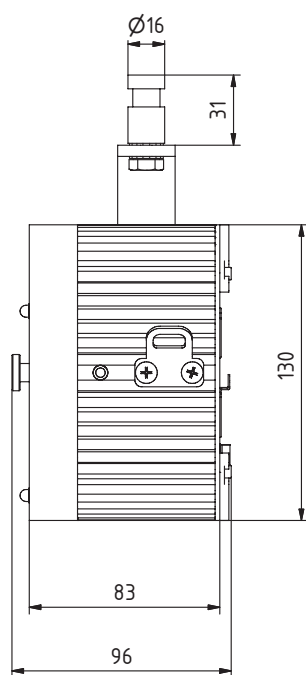
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System overview

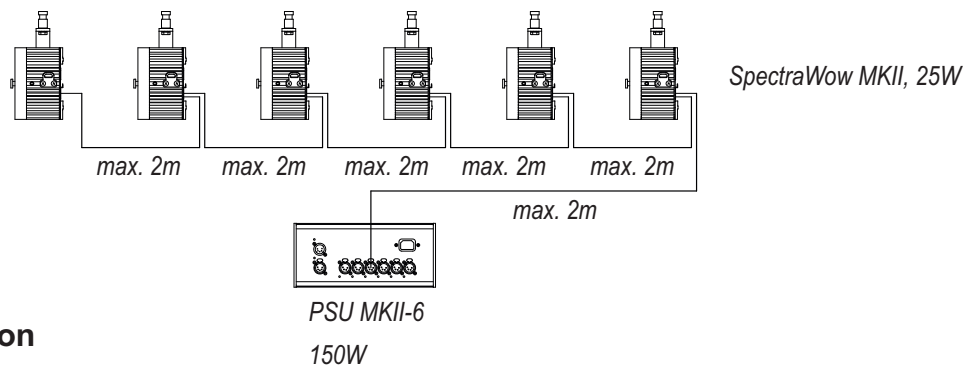


Wiring

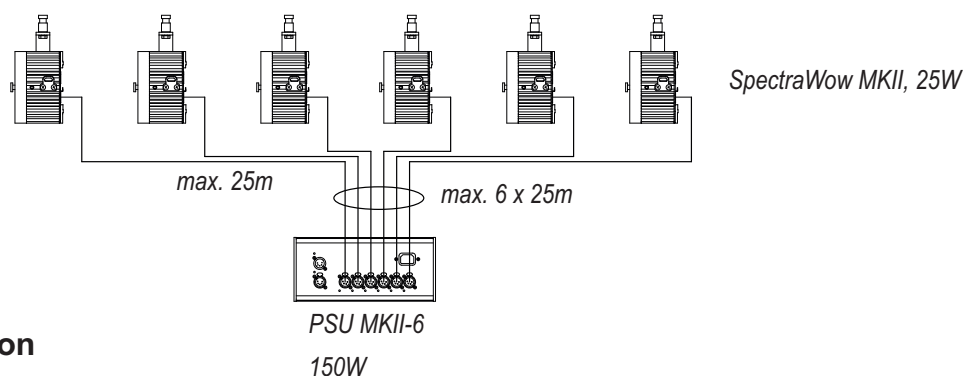


The recommended cable lengths are valid when LDDE connection cables and the LDDE PSU/MKII-6 are used. If longer cables are used, unwanted side effects like differing brightness and changing colour mixes can occur.

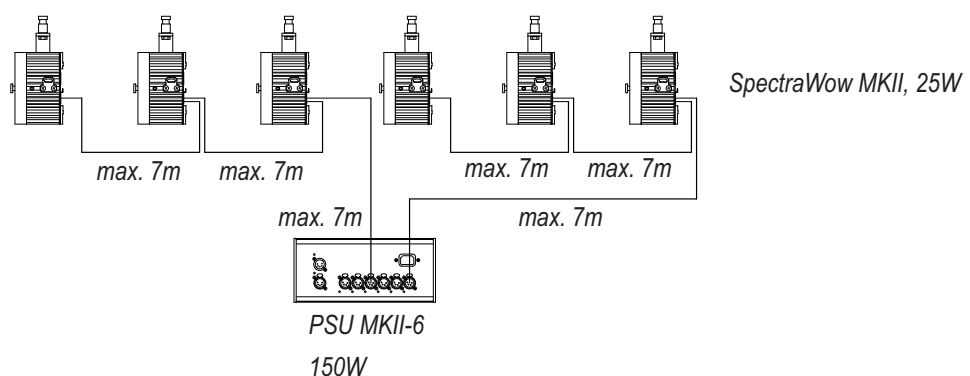
Daisy-chained installation



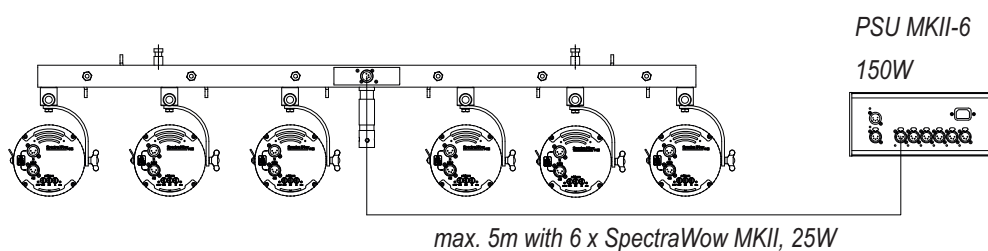
Direct installation



Mixed installation



Installation on a Quickbar



Installation

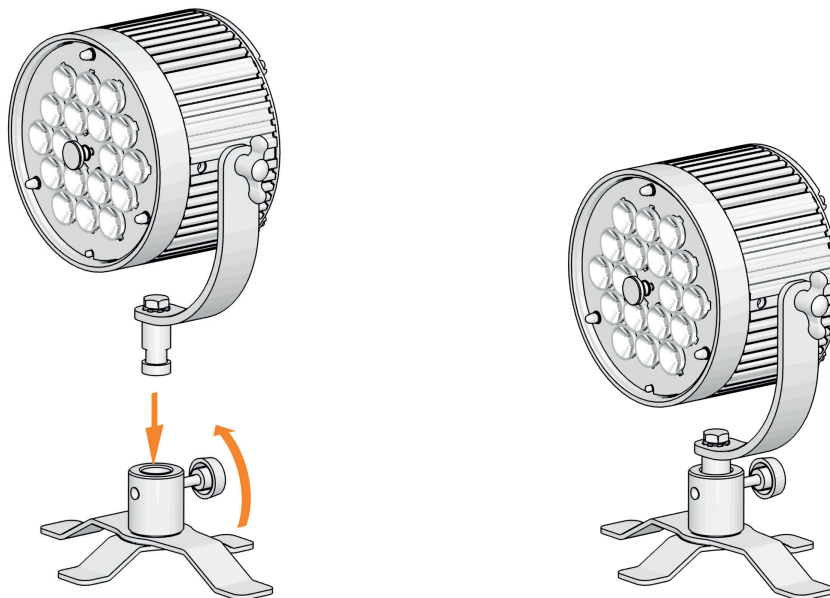


Disconnect the power supply and consider removing the fuse for the particular power circuit! Make sure that all parts of the SpectraWow+ are installed and screwed together.

Installation with a floor stand

1. Put the SpectraWow MKII into the socket of the floor stand and screw the locking knob tight. Make sure that the SpectraWow MKII is placed in a dry and dust-free environment. Then connect the power/data cable and the mains lead again and switch the power on.

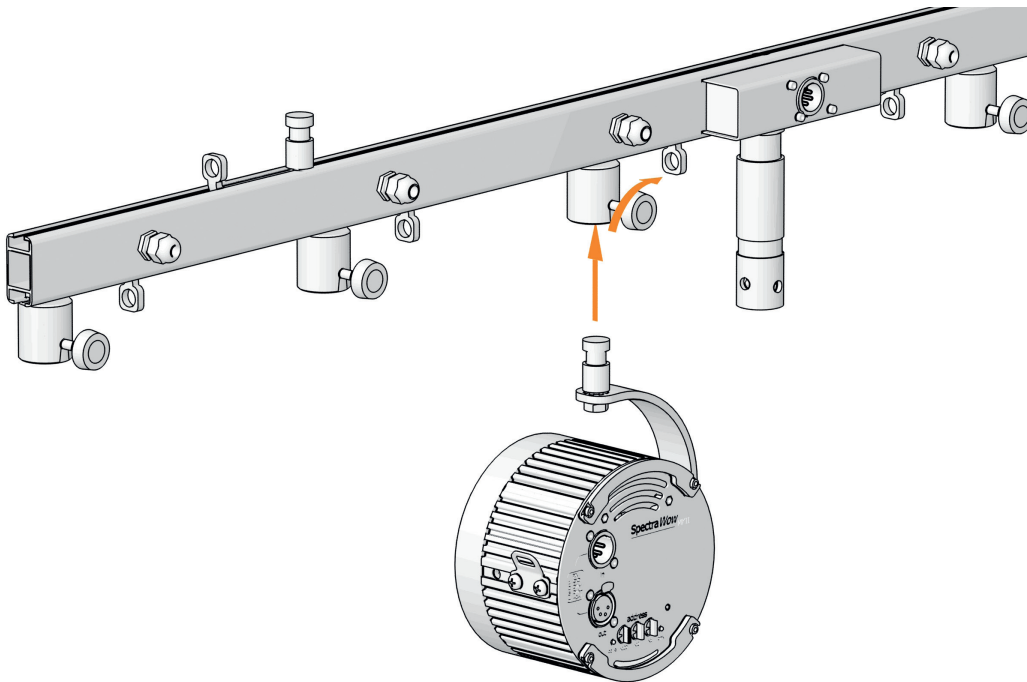
1



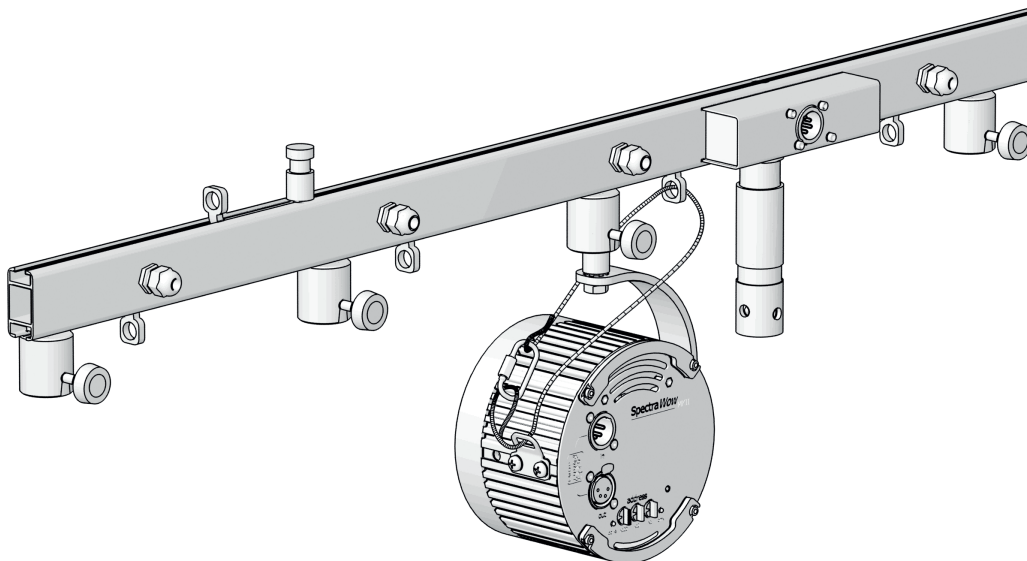
Installation with a Quickbar

1. To start with, install the SpectraWow MKII fixtures on a Quickbar by inserting the 16mm spigot into a socket of the Quickbar and screw the locking knob tight. Then connect the power/data cable to the fixtures. Put the 28mm spigot of the Quickbar into the socket of a tripod or use the two 16mm spigots together with two Manfrotto 035 clamps to suspend the Quickbar on a pole or truss construction.
2. Secure the fixture with a safety rope that is fastened to the holders on the sides of the fixture and the bottom side of the quickbar. When all fixtures are installed, plug the power/data cable into the XLR connector socket in the middle of the Quickbar and switch the power on.

1



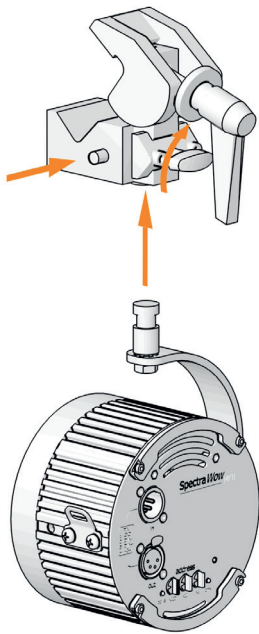
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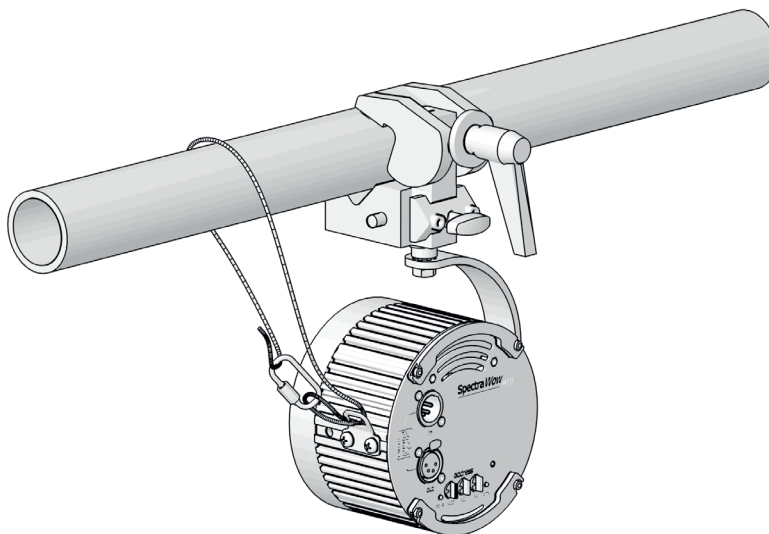
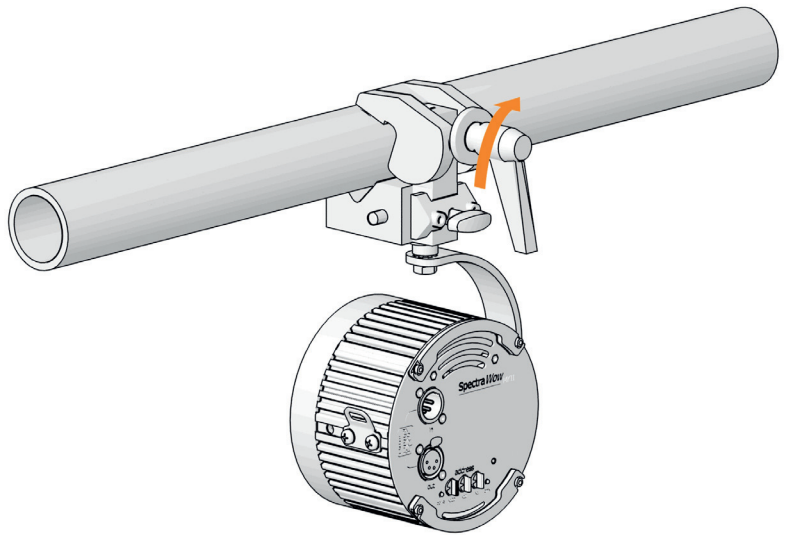
Installation with mounting clamps

1. Put the mounting clamp on the 16mm spigot of the SpectraWow MKII and press the locking knob on the side of the clamp. Then screw the locking knob tight.
2. Mount the mounting clamp on the designated truss or pole. Fasten a safety rope to the orange holders on the sides of the fixture to secure the SpectraWow MKII. Then connect the power/data cable and the mains lead again and switch the power on.

1



2

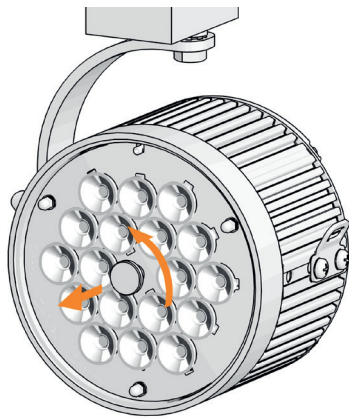


Changing lenses

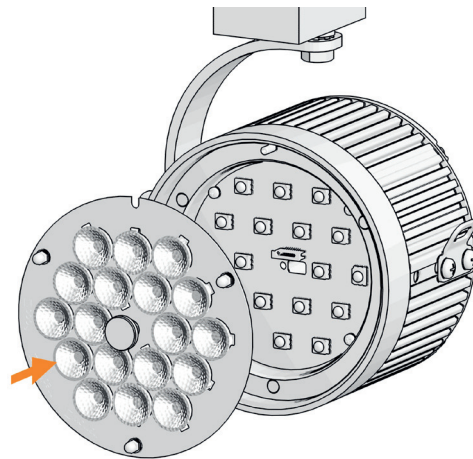
Only use lens modules made by LDDE which are designed for the SpectraWow MKII. These are optionally available with a beam angle of 10°, 30° and 50°.

1. Make sure that the power supply to the appliance is disconnected. Open the screw from the lens module and carefully remove it.
2. Mount the new lens module on the fixture and tighten the screw again. Then switch the power supply back on.

1



2



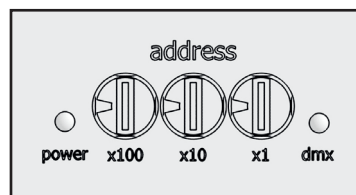
Operation start-up

Adressierung

The SpectraWow MKII uses five channels. Ist die DMX Adresse 1 eingestellt, belegt der SpectraWow MKII die Kanäle 1 - 5. If the DMX address is set to 1, SpectraWow MKII uses channels 1-5. If channels of one appliance overlap channels of another appliance, one of the appliances will not react as intended. Two SpectraWow MKII of the same type can share the same start-address, receive the same commands and be controlled together.

Setting the DMX-address

The DMX-address is set with three BCD-switches. The default setting for the appliance is start-address 1. Chose a DMX-address for the SpectraWow MKII with your control system and set the BCD-switch to the assigned address.



Example: setting
DMX channel 125
X100 = 1
X10 = 2
X1 = 5

Channel assignment

After successful first addressing, the following channel assignment applies:

1	Intensity
2	R (red)
3	G (green)
4	B (blue)
5	Strobe

LED indication

The SpectraWow MKII has two LED-indicators:

	Colour
Power	green
DMX	red (no DMX signal) green (DMX signal available)

Technical specifications

Measurements / Weight

Height with yoke	196 mm / 7.7 inches
Diameter	130 mm / 5.11 inches
Width	96 mm / 3.78 inches
Weight	1.3 kg / 2.86 lbs

Control

Protocol	DMX512/1990
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Regulating

Range	0-100%
DMX channels	5
Addressing	BCD

Photometrical Information

Light source	Cree Power LED
Lamp	18x 1W LED (each 6x R, G, and B)
Beam angle	10°, 30°, 50°
Lifespan	ca. 60.000 hours

Connections

Wiring	power/data multicore plug Neutrik 4pin IN / OUT
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Electrical data

Voltage rating	24 VDC
Max. power consumption	25 W

Construction

Housing	aluminium strand casting profile for every installation situation
Colour	black, silver grey, white (further RAL colours on request)
Protection class	IP20

Safety standards

Certification	EN 55015, EN 60598-1, EN 60825-1, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-3
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Temperature

Surrounding temperature	ta: -5°C ... +40°C
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Accessories

PSU/MKII-6 Power Supply, 200W, silent, up to 4 SpectraWow+	20050310710
PSU-Rack 3200, 19" version, 3x200W, up to 12 SpectraWow+	20050310712
QuickBar 4-way QB-4, installation profile wired	20050900210
QuickBar 4-way QBCU-4, installation profile unwired, custom length	20050900214
QuickBar 4x-way QBU-4, installation profile unwired	20050900212
QuickBar 6-way QB-6, installation profile wired	20050900211
QuickBar 6x-way QBCU-6, installation profile unwired, custom length	20050900215
QuickBar 6x-way QBU-6, installation profile unwired	20050900213
SpectraWow MKII lens module LS-10, exchangeable lens module 10° (narrow)	20050900220
SpectraWow MKII lens module LS-30, exchangeable lens module 30° (medium)	20050900223
SpectraWow MKII lens module LS-50, exchangeable lens module 50° (flood)	20050900226
Floor stand, black, incl. 16mm spigot	20050900290
Power/data cable, 0,5m/1.64 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110001
Power/data cable, 1m/3.28 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110002
Power/data cable, 2m/6.56 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110003
Power/data cable, 3m/9.84 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110004
Power/data cable, 5m/16.4 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110006
Power/data cable, 7m/22.96 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110012
Power/data cable, 10m/32.8 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110009
Power/data cable, 15m/49.21 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110010
Power/data cable, 20m/65.6 ft., max. 24V, DMX Multicore plug (IP67), 4-pole	20026110011

Ordering information

SpectraWow MKII SWMKII-I-118-RGB/B, black, without lens module	20050310980
SpectraWow MKII SWMKII-I-118-RGB/G, silver grey, without lens module	20050310981
SpectraWow MKII SWMKII-I-118-RGB/W, white, without lens module	20050310982

Maintenance and service

Should problems arise, always contact an authorised LDDE partner or LDDE directly.

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Fax: +43.1.7671811-99
office@ldde.com
www.ldde.com

Warranty and Liability

Warranty for the SpectraWow MKII is granted for 24 months. The warranty includes free of charge repairs in the case of defects verifiably due to faulty fabrication. Elimination of such defects exclusively by the manufacturer.

Warranty expires in the case of:

- Modifications or attempts at repairs by unauthorised persons.
- Damage through tampering by third parties.
- Damage due to not complying with the manual.
- Connection to wrong voltage.
- Incorrect operation or damage through negligence or misuse.

In particular, LDDE declines any liability for damage to the appliance or further damage, due to unsuitable use, incorrect installation, faulty start-up and operation and non-observance of valid safety regulations.



Declaration of Conformity according to directives 2004/108/EG and 2006/95/EG

Manufacturer: LDDE Vertriebs GmbH
Dreherstraße 64
1110 Vienna, Austria

declares that the product listed below

Product: SpectraWow MKII SWMKII-I-118-RGB/B
SpectraWow MKII SWMKII-I-118-RGB/G
SpectraWow MKII SWMKII-I-118-RGB/W

is in compliance with the essential requirements of the following directives:

Standards: EN 55015, EN 60598-1, EN 60825-1, EN 61000-3-2, EN 61000-3-3,
EN 61000-6-1, EN 61000-6-3

Kurt Reiter
(President)

Vienna, September 6, 2010
(Date)